

ABSTRACT

Radio equipment enabling radio communication with frequency conversion corresponding to signals of different frequency bands is disclosed. A local oscillator signal generator included in this radio equipment having a first signal generator, a second signal generator, and a frequency synthesizer generating a local oscillator signal. A first signal having first frequency is generated in the first signal generator, and a second signal having second frequency smaller than the first frequency is generated in the second signal generator. These first and second signals are synthesized, and the local oscillator signal either having the frequency derived from adding the second frequency to the first frequency, or having the frequency derived from subtracting the second frequency from the first frequency is generated.